

**MWI 8040.5
REVISION B**

**EFFECTIVE DATE: October 28, 2004
EXPIRATION DATE: October 28, 2009**

MARSHALL WORK INSTRUCTION

ED01

FLOOR ENGINEERING ORDERS AND FLOOR ENGINEERING PARTS LISTS (FEOs/FEPLs)

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Marshall Work Instruction ED01		
Floor Engineering Orders and Floor Engineering Parts Lists (FEO/FEPLs)	MWI 8040.5	Revision: B
	Date: October 28, 2004	Page 2 of 6

DOCUMENT HISTORY LOG

Status (Baseline/ Revision/ Canceled)	Document Revision	Effective Date	Description
Baseline		10/1/00	MWI derived from CM-INST-001 and CM-INST-003. Previous history retained as part of historical MSFC Documentation Repository files.
Revision	A	1/16/02	Deleted paragraph 3.2, CM-INST-002, and renumbered subsequent paragraphs. Paragraph 5, last sentence: deleted "as defined in CM-INST-002" and replaced with "accessible at http://starbase.msfc.nasa.gov:8000/forms ." Paragraph 6.2.3.1, deleted "according to CM-INST-002." [Footer URL updated 01/14/2004 by Directives Manager.]
Revision	B	10/28/2004	Updated document to clarify "shall" statements and update formatting per Rules Review.

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Marshall Work Instruction ED01		
Floor Engineering Orders and Floor Engineering Parts Lists (FEO/FEPLs)	MWI 8040.5	Revision: B
	Date: October 28, 2004	Page 3 of 6

TABLE OF CONTENTS

<u>PARAGRAPH</u>	<u>PAGE</u>
TABLE OF CONTENTS.....	3
1. PURPOSE.....	4
2. APPLICABILITY.....	4
3. APPLICABLE DOCUMENTS	4
4. REFERENCES	4
5. DEFINITIONS.....	4
6. INSTRUCTIONS.....	4
6.1 Organization Performing Modification of Hardware	4
6.2 Responsible Design Activity	5
6.3 MSFC Release Desk	5
6.4 Quality Assurance	5
7. NOTES.....	6
8. SAFETY PRECAUTIONS AND WARNING NOTES	6
9. RECORDS	6
10. PERSONNEL TRAINING AND CERTIFICATIONS	6
11. FLOW DIAGRAM	6
12. CANCELLATION.....	6

Marshall Work Instruction ED01		
Floor Engineering Orders and Floor Engineering Parts Lists (FEO/FEPLs)	MWI 8040.5	Revision: B
	Date: October 28, 2004	Page 4 of 6

1. PURPOSE

To provide instructions for expediting the process of change documentation (engineering orders (EOs) and engineering parts lists (EPLs) as FEOs/FEPLs to allow manufacturing or test organizations to proceed without interruption. This process avoids schedule impacts while the change package containing the official baseline configuration documentation is in the preparation, approval, and release cycle. NOTE: The FEO/FEPL method is a risk jointly taken by the responsible design and manufacturing or test organizations.

2. APPLICABILITY

This Instruction is limited to Marshall Space Flight Center (MSFC) in-house activities conducted by MSFC personnel and MSFC support contractors. This Instruction shall not be utilized for processing changes to specific contract requirements.

3. APPLICABLE DOCUMENTS

3.1 MPR 1440.2, "MSFC Records Management Program"

3.2 MPR 8040.1, "Configuration Management, MSFC Programs/Projects"

3.3 NPR 1441.1, "NASA Records Retention Schedules"

4. REFERENCES

None

5. DEFINITIONS

FEO/FEPL. The method by which design and manufacturing or test organizations agree to an engineering change which allows manufacturing or test to proceed without a schedule impact while design prepares the official change package. The FEO/FEPL method uses the EO/EPL forms accessible at <http://starbase.msfc.nasa.gov:8000/forms>.

6. INSTRUCTIONS

6.1 Organization Performing Modification of Hardware:

6.1.1 Shall identify the need for an FEO/FEPL and coordinate with the design activity. If the hardware is in testing, test organization may need to coordinate the need for change with manufacturing and design organizations.

6.1.2 Shall sign the design prepared FEO/FEPL.

Marshall Work Instruction ED01		
Floor Engineering Orders and Floor Engineering Parts Lists (FEO/FEPLs)	MWI 8040.5	Revision: B
	Date: October 28, 2004	Page 5 of 6

6.1.3 Shall implement the FEO/FEPL.

6.1.4 Shall provide the design organization an estimated need date that the released EO/EPL shall be available for parts inspection. The released EO/EPL shall replace the FEO/FEPL in the work order package, and the EO/EPL shall be used for inspection. A part/assembly that has an FEO/FEPL against it shall not be used in the next higher assembly until inspected to the released EO/EPL.

6.2 Responsible Design Activity:

6.2.1 Shall coordinate with manufacturing or test personnel, prepare the required FEO/FEPL, and obtain the appropriate number identifiers from the MSFC Release Desk.

6.2.2 Shall sign the FEO/FEPL and obtain manufacturing or test personnel signature.

6.2.3 Shall process the original signed FEO/FEPL as an EO/EPL as follows:

6.2.3.1 Shall add additional information required to the FEO/FEPL for processing as a normal EO/EPL.

6.2.3.2 Shall prepare and submit the change package with supporting documentation to the Configuration Control Board (CCB) Secretariat in accordance with MPR 8040.1. However, the design organization is responsible in lieu of the CCB Secretariat for processing the change through the CCB to the MSFC Release Desk to meet the estimated need date specified in 6.1.4. A part/assembly with an FEO/FEPL against it shall not be used in the next higher assembly until inspected to the released EO/EPL.

6.2.3.3 Shall cancel or replace the original FEO/FEPL, notify the organization performing the modification, and reinitiate this entire process if a technical change is required to the signed FEO/FEPL.

6.3 MSFC Release Desk:

6.3.1 Shall assign appropriate numbers when requested by the design organization.

6.3.2 Shall expedite the release of the change package and distribute a copy of the released EO/EPL to the manufacturing or test organization.

6.4 Quality Assurance. The responsible Quality Assurance organization shall inspect the hardware to the released EO/EPL. If the released EO/EPL is not available when required, the Quality Assurance organization shall put a hold on the hardware and notify the Project Manager or System Engineer.

Marshall Work Instruction ED01		
Floor Engineering Orders and Floor Engineering Parts Lists (FEO/FEPLs)	MWI 8040.5	Revision: B
	Date: October 28, 2004	Page 6 of 6

7. NOTES

None

8. SAFETY PRECAUTIONS AND WARNING NOTES

None

9. RECORDS

FEOs/FEPLs processed in accordance with this document are replaced by the EOs/EPLs and shall be maintained in accordance with MPR 1440.2 and NPR 1441.1, Schedule 7 and 8. The CCB Secretariat or designee shall serve as the records custodian and maintain as a part of the Program Control Number (PCN) files.

10. PERSONNEL TRAINING AND CERTIFICATION

None

11. FLOW DIAGRAM

None

12. CANCELLATION

MWI 8040.5A dated January 16, 2002

Original signed by
Robin N. Henderson for

David A. King
Director